JB COMMENTS: USING CHEMICAL SOIL TESTS

It is surprising how often I have observed professional turf managers struggling with turf problems who have never arranged for chemical soil tests to be conducted on the turf facilities for which they are responsible. Chemical soil tests involve a very minimal cost for the benefits derived. Certainly, there is no excuse for not securing soil tests to provide guidance in proper decision making concerning fertilization of turfs. Consider the possibility of being called before a local city or regional governing body to justify past fertilization practices on a turf facility. Chemical soil tests are excellent documents to present before such a hearing. The chances of obtaining favorable consideration are greatly diminished if no soil tests have been conducted.

Even more surprising are turf sites struggling with problems where soil tests have been conducted, but no action has been taken in terms of adjustments based on the chemical soil test findings. Why is this? Were the soil tests actually read? Is there a lack of confidence in the soil test results? Is there an inability to properly interpret the soil tests?

The macronutrient that I observe being most commonly and severely deficient on turfgrass sites, even though soil tests have been conducted, is potassium (K). Phosphorus (P) is occasionally deficient, especially on high-sand root zones. Among the essential micronutrients, a problem too often encountered that has a potential to create severe turf problems is excessively high zinc (Zn) and/or copper (Cu) levels. If excess levels are indicated by chemical soil tests, it is important to cease the use of micronutrient combinations that include zinc and/or copper, depending on whether one or both are in excess.

An important aid in interpreting trends in chemical soil tests is to develop a separate file in which are recorded a minimum of three years analyzes for each distinct turf area.

The importance of properly understanding, interpreting, and implementing turfgrass nutritional programs based on chemical soil test results can not be over emphasized. My personal experience has shown that even minor adjustments in nutritional levels can make major differences in terms of the desired turf responses and performance.